ESTER DERIVATIVES

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Abstract of **WO0204402**

Compounds of the general formula (¦), which exhibit selective muscarinic M3 receptor antagonism, little have side effects, and are suitable for administration by inhalation and useful as therapeutic agents for respiratory system diseases or the like: (¦) wherein A is a group of the general formula (a0) or (b0): (a0) (b0) Ar is aryl or heteroaryl, any of which may be substituted; B<1> and B<2> are each an aliphatic hydrocarbon group; R<1> is fluorinated cycloalkyl; R<2>, R<3> and R<4> are each lower alkyl, or a single bond or alkylene, any of which is bonded to B<1>, or alternatively R<2> and R<3> may be united to form alkylene; R<5> and R<7> are each hydrogen, lower alkyl, or a single bond or alkylene, any of which is bonded to B<2>; R<6> is hydrogen, lower alkyl, or N(R<8>)R<9>; and X<-> is an anion.
Compounds of the general formula (¦), which exhibit selective muscarinic M3 receptor antagonism, little have side effects, and are suitable for administration by inhalation and useful as therapeutic agents for respiratory system diseases or the like: (¦) wherein A is a group of the general formula (a0) or (b0): (a0) (b0) Ar is aryl or heteroaryl, any of which may be substituted; B<1> and B<2> are each an aliphatic hydrocarbon group; R<1> is fluorinated cycloalkyl; R<2>, R<3> and R<4> are each lower alkyl, or a single bond or alkylene, any of which is bonded to B<1>, or alternatively R<2> and R<3> may be united to form alkylene; R<5> and R<7> are each hydrogen, lower alkyl, or a single bond or alkylene, any of which is

bonded to B<2>; R<6> is hydrogen, lower alkyl, or N(R<8>)R<9>; and X<-> is an anion.

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(54) **ESTER DERIVATIVES**

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(58) **Field of Search** 546/192, 194, 546/236; 514/317, 318

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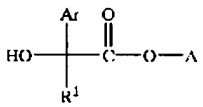
(57) **ABSTRACT**

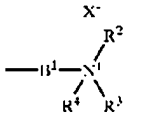
This invention relates to compounds which exhibit selective muscarinic M_3 receptor antagonism, have little side effects, are suitable for inhalation therapy and are useful as treating agents of respiratory system diseases, of the general formula (I);

(I)

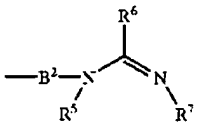


[in which A signifies a group expressed by a formula (a_0) or (b_0);

(a_0)



(b_0)



Ar signifies optionally substituted aryl or heteroaryl; B^1 and B^2 signify aliphatic hydrocarbon; R^1 signifies fluorine-substituted cycloalkyl; R^2, R^3 and R^4 signify lower alkyl, single bond or alkylene bonded to B^1, or R^2 and R^3 are united to signify alkylene; R^5 and R^7 signify hydrogen, lower alkyl, or a single bond or alkylene bonded to B^2; R^6 signifies hydrogen, lower alkyl or a group expressed as $—N(R^8)R^9$; and X^- signifies an anion].

32 Claims, No Drawings